

### **REMARKS**

Claims 1-21 are pending. Claims 1-21 are rejected by this Office Action. Applicant is amending claims 1-19.

Applicant thanks the Examiner for the telephonic interview on February 7, 2007.

Applicant also notes that the present patent application is claiming priority to PCT/US99/02654 (with a 371 date of February 8, 1999), which is a continuation of application 09/219,478 having a filing date of December 22, 1998.

### **Other Amendments**

Applicant is amending claims 1-19 to replace “presentation” with “tutorial presentation.” The amendment is supported by the specification as originally filed, e.g., page 4, line 24-page 5, line 38 and page 13, line 11-page 14, line 12.

### **Claim Rejections – 35 U.S.C. §101**

**Claims 1-21 are rejected by the Office Action allegedly for being directed to non-statutory subject matter.**

The Office Action alleges that (Page 3.):

The phrase ‘creating a presentation’ is too broad and falls outside of a real world application and is considered abstract. The result has to be a practical application.

Applicant notes that claims 1 and 10 contain the features “for creating a **tutorial** presentation” and “An apparatus that creates a **tutorial** presentation,” respectively. (Emphasis added.) Applicant subsequently added independent claim 19, which includes the feature “A computer-readable medium for creating a tutorial presentation and having computer-executable instructions.” Applicant also notes that this Office Action is the sixth office action based on the merits and that this rejection is being introduced in this Office Action. The Office Action further alleges (Page 3.):

In determining whether the claim is for a “practical application,” the focus is not one whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is “useful, tangible and concrete.” If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that

does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. The claims do not teach a real world application. If the claims are to be used for the instruction of children, automotive repair or running a political campaign then none have been stated.

Regarding claim 1, the claim further includes the feature of “wherein the tutorial presentation provides a cognitive educational experience” and thus provides a final result that is useful, concrete, and tangible. Independent claims 10 and 19 include similar features. Moreover, claims 2-9, 11-18, and 20-21 ultimately depend from claims 1, 10, and 19 and are directed to statutory subject matter. Applicant requests reconsideration of claims 1-21.

### **Claim Rejections – 35 U.S.C. §112**

**The Office Action rejects 1, 10, 19, and 20 under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the enablement requirement.**

The Office Action alleges that (Page 4.):

Claims 1, 10, 19, and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims contain the phrase ‘simulation domain’ which is not mentioned at all in the specification. The claims and/or the specification must be amended to correct the rejection.

Regarding claim 1, the claim includes the feature of “matching a profile against a **simulation domain**, wherein the profile comprises a set of criteria,” which was introduced as an amendment in the paper filed on January 4, 2005. (Emphasis added.) As discussed in that paper, Applicant discussed that the amendment is supported by the specification as originally filed, e.g., page 9, lines 3-34. Applicant believes that, as previously discussed, the specification complies with the enablement requirement with respect to the phrase “simulation domain.” Claim 10 includes the similar feature of “logic that matches a profile against a simulation domain, wherein the profile comprises a set of criteria and identifies a desired aspect for a current simulation task.” Similarly, claim 19 includes the feature of “matching a profile against a simulation domain, wherein the profile comprises a set of criteria and identifies a desired aspect for a current simulation task.” Moreover, claim 20 depends from claim 19. Applicant requests reconsideration of claims 1, 10, 19, and 20.

**Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the enablement requirement.**

The Office alleges (Page 5.):

The statement ‘providing subsequent feedback to the student, based on the other profile’ is not mentioned in the specification. The claims and/or the specification must be amended to correct this rejection.

As discussed in the paper filed on August 31, 2006, claim 21 is supported by the specification as originally filed, e.g., page 9, line 32-page 10, line 6. The specification discloses (page 9, line 32-page 10, line 6. Emphasis added.):

**A profile is composed of two types of structures: characteristics and collective characteristics. A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student.** Example characteristics include: Wrong debit account in transaction 1; Perfect cost classification; At Least 1 DUI in the last 3 years; More than \$4000 in claims in the last 2 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's  $\geq 1$ ; ROI > 10%; and Income between \$75,000 and \$110,000. A collective characteristic is a conditional that uses multiple characteristics and/or other collective characteristics as its operands. Collective characteristics allow instructional designers to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense transactions; and Problems with Sources and uses of cash. **Once created, designers are able to reuse these elements within multiple expressions, which significantly eases the burden of creating additional profiles.** When building a profile from its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

Applicant believes that, the specification complies with the enablement requirement with respect to the feature of “providing subsequent feedback to the student, based on the other profile.”

Applicant requests reconsideration of claim 21.

**The Office Action rejects claims 1-21 under 35 U.S.C. 112, first paragraph, allegedly because the specification, while being enabling for a tutorial system, does not reasonably provide enablement for ‘creating a presentation’.**

The Office Action alleges (Page 5.):

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The specification is directed for a learning/tutorial system but claims are much broader and thus there exists a scope of enablement rejection. The claims and/or specification must be amended to correct this rejection.

However, as previously discussed, claims 1, 10, and 19 is directed to a “tutorial presentation.” As admitted by the Examiner, the specification is directed to a learning/tutorial system. Moreover, claims 2-9, 11-18, and 20-21 depend from claims 1, 10, and 19. The specification (e.g., page 1, lines 30-39) is commensurate in scope with the claimed invention. Applicant requests reconsideration of claims 1-21.

**Claims 1, 10, and 19 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the enablement requirement.**

The Office Action alleges that (Page 5.):

The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims make the statement that providing feedback which provide further motivation for accomplishing the tasks. There exists not grounds or basis for this assumption. “Motivation” is an intangible quality which is not directly linked to feedback. The claims and/or specification must be amended to correct this rejection.

Applicant notes that claims 1 and 10 contained the features “providing feedback that further motivates accomplishment of the goal” and “logic that monitors progress toward the goal and provides feedback that further motivates accomplishment of the goal,” respectively, as originally filed. Applicant subsequently amended claims 1 and 10 to include the features of “providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal” and “logic that monitors progress toward the goal, determines at least one profile that is true for the current simulation task from a set of profiles, and provides feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal,” respectively. Also, Applicant previously added claim 19 to include the similar feature of “monitoring progress toward the goal, determining at least one profile from that is true for the current simulation task a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal.” The Applicant also notes that

this Office Action is the sixth office action based on the merits and that this rejection is being introduced in this Office Action.

Also, in accordance with MPEP § 2111.01:

The words of a claim must be given their “plain meaning” unless they are defined in the specification.

Applicant notes that claims 1, 10, and 19 refer to “motivates” and not to “motivation.” Moreover, the plain meaning of “motivates” is “provide with an incentive.” (American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) For example, the specification, as originally filed, discloses (Page 7, lines 6-15.):

Every BusSim application does analysis on the data that defines the current state of the simulation many times throughout the execution of the application. This analysis is done either to determine what is happening in the simulation, or to perform additional calculations on the data which are then fed back into the simulation. For example, the analysis may be the recognition of any actions the student has taken on artifacts within the simulated environment (notebooks, number values, interviews conducted, etc.), or it may be the calculation of an ROI based on numbers the student has supplied. **Substantive, useful feedback is a critical piece of any BusSim application. It is the main mechanism to communicate if actions taken by the student are helping or hurting them meet their performance objectives.** The interpretation piece of the set of proposed commonalties takes the results of any analysis performed and makes sense of it. It takes the non-biased view of the world that the Analysis portion delivers (i.e., "Demand is up 3%") and places some evaluative context around it (i.e., "Demand is below the expected 7%; you're in trouble!", or "Demand has exceeded projections of 1.5%; Great job!").

The specification also discloses (Page 12, lines 16-27. Emphasis added.):

In this task, the student must journalize twenty-two invoices and other source documents to record the flow of budget dollars between internal accounts. (Note: "Journalizing", or "Journalization", is the process of recording journal entries in a general ledger from invoices or other source documents during an accounting period. The process entails creating debit and balancing credit entries for each document. At the completion of this process, the general ledger records are used to create a trial balance and subsequent financial reports.) In accordance with a preferred embodiment, an Intelligent Coaching Agent Tool (ICAT) was developed to standardize and simplify the creation and delivery of feedback in a highly complex and open-ended environment. **Feedback from a coach or tutor is instrumental in guiding the learner through an application.** Moreover, by diagnosing trouble areas and recommending specific actions based on predicted student understanding of the domain student comprehension of key concepts is increased. By writing rules and feedback that correspond to a proven feedback strategy, consistent feedback is delivered throughout the application, regardless of

the interaction type or of the specific designer/developer creating the feedback. The ICAT is packaged with a user-friendly workbench, so that it may be reused to increase productivity on projects requiring a similar rule-based data engine and repository.

As exemplified by the above teachings and in conjunction with the plain meaning of the claims, the present specification is enabling with respect to the feature of “providing feedback which provide further motivation for accomplishing the tasks.” Applicant is requesting reconsideration of claims 1, 10, and 19.

**Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.**

The Office Action alleges that (Page 6.):

The claim(s) contains subject matter which was not described in the specification in such a way to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This claim states that ‘logic’ is used for numerous purposes but applicant fails to claim what type of logic is being implemented. Is it Boolean logic, predicate calculus logic, modern algebraic logic (rings and sets etc.) quantum logic? The Examiner does not know what type of logic is being used. The claims and/or specification must be amended to correct this rejection.

Applicant notes that claim 10 contains features referring “logic” as originally filed. The Applicant also notes that this Office Action is the sixth office action based on the merits and that this rejection is being introduced in this Office Action. Moreover, Applicant is amending claim 10 to include the feature of “a processor that runs a computer program to create the tutorial presentation, **the computer program comprising of logic.**” (Emphasis added.) The amendment is supported by the specification as originally filed. For example, the specification discloses (Page 5, line 37-page 6, line 6. Emphasis added.):

During the build phase, the application development team uses the detailed designs to code the application. Coding tasks include the interfaces and widgets that the student interacts with. The interfaces can be made up of buttons, grids, check boxes, or any other screen controls that allow the student to view and manipulate his deliverables. **The developer must also code logic that analyzes the student's work and provides feedback interactions.** These interactions may take the form of text and/or multimedia feedback from simulated team members, conversations with simulated team members, or direct manipulations of the student's work by simulated team members. In parallel with these coding efforts, graphics, videos, and audio are being created for use in the application. Managing the development of these assets have their own complications. Risks in the build

phase include misinterpretation of the designs. If the developer does not accurately understand the designer's intentions, the application will not function as desired. Also, coding these applications requires very skilled developers because the logic that analyzes the student's work and composes feedback is very complex.

Claim 10 refers to "logic" that would enable one of ordinary skill in the art to make and/or use the invention. Applicant requests reconsideration of claim 10.

**Claim 5 and 14 are rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the enablement requirement.**

The Office Action alleges that (Page 6.):

The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims have the term 'source code' in them but said term is lacking within the specification. 'Source code' should have a number of meanings and manifestations but it is not within the specification for clarification or description. The claims and/or the specification must be amended to correct this rejection.

Applicant notes that claims 5 and 14 contain features referring "displaying source code of the tutorial presentation as the tutorial presentation executes" and "logic that displays source code of the tutorial presentation as the tutorial presentation executes", respectively, as originally filed. The Applicant also notes that this Office Action is the sixth office action based on the merits and that this rejection is being introduced in this Office Action. Moreover, the specification discloses embodiments that utilize different programming languages. For example, the specification discloses that (Page 3, lines 15-23. Emphasis added.):

A preferred embodiment is written using **JAVA**, **C**, and the **C++** language and utilizes object oriented programming methodology. Object oriented programming (OOP) has become increasingly used to develop complex applications. As OOP moves toward the mainstream of software design and development, various software solutions require adaptation to make use of the benefits of OOP. A need exists for these principles of OOP to be applied to a messaging interface of an electronic messaging system such that a set of OOP classes and objects for the messaging interface can be provided. A simulation engine in accordance with a preferred embodiment is based on a Microsoft **Visual Basic** component developed to help design and test feedback in relation to a Microsoft **Excel** spreadsheet. These spreadsheet models are what simulate actual business functions and become a task that will be performed by a student. The Simulation Engine accepts simulation inputs and calculates various outputs and notifies the

system of the status of the simulation at a given time in order to obtain appropriate feedback.

For example, a Visual Basic component may be represented as a set of instructions that must be translated to machine instructions before the program can be run on a computer. (Newton's Telecom Dictionary, Eleventh Edition, 1996.) Thus, one of ordinary skill in the art would be enabled to make and/or use the invention. Applicant requests reconsideration of claims 5 and 14.

### **Claim Rejections – 35 U.S.C. §102**

**Claims 1-21 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 5,302,132 (Corder).**

Regarding claim 1, Applicant is amending the claim to include the feature of “monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile **conjunctively** using a plurality of characteristics, each characteristic identifying a subset of the simulation domain.” (Emphasis added.) The amendment is supported by the specification as originally filed. For example, the specification discloses (page 9, line 32-page 10, line 6. Emphasis added.):

A profile is composed of two types of structures: characteristics and collective characteristics. A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Prefect cost classification; At least 1 DUI in the last 3 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's  $\geq 1$ ; ROI  $> 10\%$ ; and income between \$75,000 and \$110,000. **A collective characteristic is a conditional that uses multiple characteristics and/or other collective characteristics as its operands.** Collective characteristics allow instructional designer to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense Transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse there elements with multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile form its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective



characteristics and profiles, and collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

The Office Action alleges that Corder teaches (Page 7-8.):

... monitoring progress toward the goal determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal (Corder, C7:35-44; 'True' of applicant is equivalent to 'completeness' of Corder. Corder illustrates feedback in this passage as well.) the at least one profile, using a plurality of characteristics, each characteristic identifying a subset of the simulation domain (Corder, C4:15-35; 'Plurality of characteristics' of applicant is equivalent is equivalent to 'assessment' of Corder. One assessment' is for lip reading and another is for signing.); and displaying details of the computer-implemented method and displaying the presentation as the presentation executes, wherein the presentation provides a cognitive educational experience. (Corder, C6:27-37; 'Displaying details' of applicant is equivalent to 'sequence of stimuli' of Corder.)

However, Corder discloses (Column 4, lines 15-35. Emphasis added.):

FIG. 2a is a schematic representation of a teacher computer 240 or workstation. This system configuration normally has more hardware components than the student's system. "Other Devices" 248 refers to components available to the teacher, such as touch screens, track balls, etc. FIG. 2b shows a student's computer 260. It has a component 262 to digitally record the student saying the phonograms, word, or other task objective and depicts the simplest system hardware configuration from among an almost unlimited number of possibilities. A typical networked computer lab having various hardware components which might be utilized to advantage with the method of the present invention is shown in FIG. 2c. Also shown in this figure are several hardware components which facilitate the teaching of communication skills. For example, **the video camera 2081 provides for the assessment of the lip positions during speech, or in the case of a deaf learner, for recording and evaluating the student signing the lesson objective.** The current invention is not limited to particular computers or system configurations.

Corder merely discloses using one assessment or another. However, Corder does not even suggest the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain."

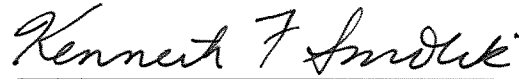
Applicant is amending claim 10 to include the similar feature of “logic that monitors progress toward the goal, determines at least one profile that is true for the current simulation task from a set of profiles, and provides feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain.” Applicant is also amending claim 19 to include the feature of “monitoring progress toward the goal, determining at least one profile from that is true for the current simulation task a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain.” Claims 2-9, 11-18, and 20-21 ultimately depend from independent claims 1, 10, and 19, respectively, and are patentable for at least the above reasons. Moreover, claim 5 includes the feature of “including displaying **source code** of the tutorial presentation as the tutorial presentation executes.” (Emphasis added.) The Office Action alleges that (Page 4, section 4. Emphasis added.):

Corder anticipates displaying source code of the presentation [presentator] as the presentation executes. (Corder, C5 17-27; **‘Displaying source code’ of applicant is equivalent to the results of the ‘display’ of Corder.**)

However, Corder merely teaches displaying content (e.g., phonograms, icons, or buttons) that results from the source code and fails to even suggest displaying the source code itself. Similarly, claim 14 includes the feature of “including logic that displays source code of the tutorial presentation as the tutorial presentation executes.” Applicant requests reconsideration of claims 1-21.

All objections and rejections have been addressed. Hence, it is respectfully submitted that the present application is in condition for allowance, and a notice to that effect is earnestly solicited.

Respectfully submitted,



Date: February 23, 2007

Kenneth F. Smolik  
Registration No. 44,344  
BANNER & WITCOFF, LTD.  
10 S. Wacker Drive, Suite 3000  
Chicago, IL 60606-7407  
Telephone: 312-463-5000  
Facsimile: 312-463-5001